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Collaborative research and urban educational discourse in contemporary higher education

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Abstract

The paper analyzes the urban educational discourse in contemporary higher education in the context of collaborative research. The complexity of modern urbanism as a discipline and as a profession indicates the importance of linking various disciplinary paradigms and forms of knowledge. Studying urbanism involves collaborative research dimension and focus on trans-disciplinary studies. Generally, the practice of studying urban discourse in contemporary higher education does not show a high level of understanding for collaborative research dimension, which points to the need for transformation of current practices of educational process. Collaborative research has a dominant place in the contemporary urban discourse.

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1. Introduction

Complex urban processes, new interconnection networks, global challenges, as well as new forms of knowledge, the development of technical and technological capabilities require complex strategic policies in the implementation of the educational process. In this context, the transformation of disciplinary into trans-disciplinary forms of studies of urbanism in contemporary higher education, an urban educational paradigm is necessary.

Urban expansion policies, intensive urbanization and technical possibilities have lead to cities developing into power centers, which are adopting a global city character. On the other hand, questions of urban poverty, urban health, urban decay, brownfield sites, urban regeneration etc. are coming into focus, demanding a higher level of insight in development and shaping of urban areas. Global approach to research and urban question-solving is an important part of sustainable development, where universities take central place in the process. In that context, collaborative educational urban discourses with a high level of collaboration can develop an adequate platform for answers to complex questions of 21st century urbanism. Production of professionals with developed conscience for a comprehensive overview of problems and with transdisciplinary collaborative knowledge can strongly contribute to sustainable upgrading, controlling and managing of urban areas.

2. Urban discourse in higher education: From fragmented towards integrated knowledge

Contemporary strategy for urbanism studies in higher education is diverse, where the model for realization of the

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study process in disciplinary frameworks is dominant. Urbanism as a complex discipline and profession includes a whole other series of areas that include collaborative relation that as such can meet contemporary challenges in solving complex issues in urbanism of the 21st century. Collaborative theoretical and practical knowledge include communicative strategy through different levels. Levels of integrality such as: multidisciplinary and interdisciplinarity can not adequately meet global and temporal challenges. Local areas are more and more adopting the epithet of “the global city” which is why global contemplation in a local context is an important moment in the development of sustainable physical structures of cities. Fragmented knowledge developed in disciplinary methodological frameworks leads to apparent or temporary problem solving. Physical structures of cities are more and more complex, urbanism is orienting more towards issues of social housing, brownfield investments, as opposed to greenfield sites which are decreasing, expansion of city territories is less and less likely, and there is an increasing need for current urban structures transformation. In that context, active issue are overpopulation, urban poverty, social challenges, urban health, ecological problems (Perovic, & Kurtovic-Folic, 2012). That implies integral research engagement and integrated knowledge.

Urban regeneration demands engagement of different stakeholders and forms of knowledge. Educational urban discourse that promotes experts with integrated knowledge, allows decision makers, urban planners, beneficiaries of the area and other stakeholders, to jointly develop adequate criteria for problem identification, diagnostics and urban rehabilitation. Strategic urban planning and designing in a holistic research action is of primary importance for sustainability of an urban system in the 21st century.

Urbanistic education in disciplinary frameworks is a classic study form, which results in fragmented knowledge and contemplation, as well as poorly developed conscience about collaboration. Fragmented knowledge solves problems in a disciplinary context, which further provides less opportunity for long-term problem solving. Generations of experts that come from mainly unified methodologies of the study process with programs of disciplinary knowledge will have difficulties meeting global challenges and complex social needs, and will also lack understanding for developing new mechanisms to answer complex issues of sustainable development, that imply adequate collaborative research platform. This is why cooperation through adequate program concepts and methodological strategies is a sustainable orientation in the process of contemporary urbanism education at universities.

Development of new branches of science such as: transurbanism, transarchitecture, transculture etc. indicate the importance of researching the global context through local interventions and also reflecting on urban space on a higher level. Urban sustainability and knowledge (Maiello, Battaglia, Daddi, & Frey, 2011) are directly linked. Universities are considered to be primary initiators of sustainable development and are largely directing future development of the society as a whole. According to Pohl and Hirsch Hadorn (2007) “the world has problems, but universities have departments”. This is why transformation of current dominant study models in higher education is of sustainable importance. Others are stating too (Brewer, Gajendran, Landorf, & Williams, 2008) that understanding the aspects of sustainability is one of the key components in study programs. Insert your heading text and choose the appropriate heading level from the style menu.

Contemporary practice shows that there are certain levels of knowledge transformation and a tendency towards a collaborative methodology of education, but with insufficiently developed criteria, and it indicates the need towards a radical revision of current systems of higher education. Research also show that certain theoretical study programs developed on a transdisciplinary platform, are being realized in practice through a disciplinary discourse. This indicates the need for re-examination of the approach for creating transdisciplinary methodological conceptions.

Also, expressed stagnation in the development of study methodologies and disciplinary generating of knowledge at the universities are being negatively reflected on dynamic urban challenges. Shortcomings in academic research approaches are reflecting on professional practice. Heterogeneous orientation of action is a precondition for sustainable development. In that context, regeneration of existing educational strategies at the universities is possible if all actors critically re-examine current conditions and take adequate action, with an emphasis on the dominant issue of stagnation. Also, academic environment dominantly contains fragmented disciplines that have little power to meet global social demands; hence collaborative action becomes the necessity of the 21st century. Higher

apprehension levels that exceed multidisciplinary and interdisciplinary possibilities are necessary. The need for transdisciplinarity is certain. “If the universities intend to be valid actors in sustainable development they have first to recognize the emergence of a new type of knowledge - the transdisciplinarity knowledge - complementary to the traditional, disciplinary knowledge” (Nicolescu, 1997).

3. Collaborative research and transdisciplinary urban knowledge

Transdisciplinarity is directed towards seeking a better world, the one that is for everyone and where every discipline can be fully expressed. For disciplines that are developing a collaborative platform, the identity component is important, as is achievement in its autonomy, and on the other hand cognizance of collaboration. According to Lattanzi (1998) “from a conceptual point of view, transdisciplinarity can be seen as a theoretical attempt to “transcend disciplines” and, by that, to react against hyperspecialization - a process leading to a dramatically growing fragmentation of knowledge - while at the same time maintaining the advantages of creativity and initiative peculiar to each specific field of knowledge”.

Transdisciplinary research reconsiders the problem in more complexity, in order to achieve a more adequate solution. “Transdisciplinarity is the “intellectual space” where the nature of the manifold links among isolated issues can be explored and unveiled, the space where issues are rethought, alternatives reconsidered, and interrelations revealed” (Lattanzi, 1998).

Also important components of transdisciplinary orientation are clear stands, visions, goals, willingness for dialog, cooperation, tolerance, accepting other people’s opinions. In that sense The charte of transdisciplinarity, Article 14 states: “*Rigor*, *openness*, and *tolerance* are the fundamental characteristics of the transdisciplinary attitude and vision. *Rigor* in argument, taking into account all existing data, is the best defense against possible distortions. *Openness* involves an acceptance of the unknown, the unexpected and the unforeseeable. *Tolerance* implies acknowledging the right to ideas and truths opposed to our own” (Freitas (de), Morin, & Nicolescu, 1994).

Transdisciplinary study is based on new experience and knowledge which is coherent, which integrates different approaches, and the complexity of problems depending on the level of cooperation and the capacity of knowledge. Besides cooperation between disciplines, also important are approaches, methods, alternatives, interactions through all levels, different conceptual platforms of disciplines and their transformation into joint program and methodological conceptions.

As other authors discuss “transdisciplinarity involves going between, across, and beyond different disciplines. While interdisciplinarity refers to the links between knowledge and models available in different disciplines, transdisciplinarity moves beyond this to develop both a new vision and a new experience of learning” (Morin, 1999). In the context of urbanism, other disciplines such as: sociology, geography, architecture, art, anthropology, engineering sciences, ecology etc. have a required place. Urban space is in its base transdisciplinary, because in a certain way all the society’s actors and different disciplines are participating in its shaping. However, collaboration between disciplines is not sufficiently represented in the majority of urbanistic projects. Multi-dimensionality of urbanistic interventions and the specificity of every task, directing towards the needs of the majority of users, relations and the implementation of non-academic knowledge in problem solving are important. Transdisciplinarity implies coordination between hierarchical levels, which is not adequately regulated and represented in other forms of cooperation. Urban structures are evolvable, variable, and getting more complex and demanding.

Collaborative research has the possibility to develop a sustainable transformation of urban areas, pushing for equality, homogeneity, order, diversity and specificity. Besides that, degradation of the environment, urban health, ecological conflicts, natural resources, consequences of industrial development, changes of dominating functions in the city, brownfield sites, increased population growth in cities, social inequality and on the other side: dynamic physical structures, new technologies and materials, new inventions, development of science, demand a more complex approach to matters of contemporary urbanism. Systematically comprehensive approach of defining, analyzing and solving problems has a dominant role in sustainability of the local in a global world. Integrated knowledge includes overcoming disciplinary frameworks, new experience in education, critical and creative

thinking. Except that, urban demands of the 21st century include: “proactive planning and today than reactive approach” (UNFPA, 2007). For example, transdisciplinary collaborative orientation could develop a strategy for urban expansion reduction and the negative consequences it reflects on sustainability, which is an important urban issue of the 21st century (Després, Vachon, & Fortin, 2011), as answers to issues “communicative rationality” and “cognitive rationality” in urban planning and designing (Després, Brais, & Avellan, 2004).

4. Directions of sustainable urban discourse development in higher education- transdisciplinary collaboration

Perspectives of sustainable urban discourse include development of universal knowledge and study that is based on four pillars, defined by the International Commission on Education for the Twenty-first Century. These are: learning to know, learning to do, learning to live with, and learning to be (Delors, 1998).

Program and methodological transformation, reorganization of study orientations, and adjusting with new study methods which are oriented towards higher levels of integrating is the primary mechanism for developing sustainable urban studies discourse. Empowerment of the idea about collaborative engagement is one of the key directions of sustainable transdisciplinary study development. That is why the policy of higher education is expected to intensify the promotion of transdisciplinary study model and development of adequate mechanism for collaborative research development.

Transdisciplinary collaborative strategy in urbanism is of sustainable importance. Without the integrity of knowledge and lifelong learning, it is hardly possible to provide answers to big issues of urbanism in a global time, in theory and in practice, in science and profession. Development of new sciences is preceded by long-term and integral analysis of the scientific system which demands collaborative engagement on the highest level. Universities should transform into places for development of transculture, transnational cooperation. New branch of science, transurbanism, has emerged recently and it points out the need for a comprehensive and more complex approach to solving urbanistic problems.

Also, globalization implies both globalization and universality of the matters of education, implementation into practice, interaction of art and science through a universal approach and transdisciplinary notion as the essential feature of urbanistic education. Besides that, development of the art of relationships building through all levels has an important role in the development of the new study method.

Also, vocational knowledge is compulsory, but not sufficient, development of other study forms, which are necessary in a joint action in solving urban issues, is also important. It is necessary to implement new ways of engagement, which are in essence interdisciplinary, into study programs. For example: different forms of courses, external participants in the study process, organizing seminars and debates, forums, publications, performances, exhibitions, and also tracking of the results and experiences as new innovating parameters of the transdisciplinary study approach. Transnational collaboration, new study methods, ateliers, centers, institutes that promote transdisciplinarity, then innovative experiences and approaches to solving urbanistic interventions, cross-referencing results of the analyses in disciplinary and transdisciplinary environment, visions of possible alternatives and all potential activities that direct to a higher level of cooperation, are important factors in the development of the transdisciplinary urban educational discourse in higher education.

All figures should be numbered with Arabic numerals (1, 2,..., n). All photographs, schemas, graphs and diagrams are to be referred to as figures. Line drawings should be good quality scans or true electronic output. Low-quality scans are not acceptable. Figures must be embedded into the text and not supplied separately. Lettering and symbols should be clearly defined either in the caption or in a legend provided as part of the figure. Figures should be placed at the top or bottom of a column wherever possible, and as close as possible to the first reference to them in the paper.

5. Conclusion

More than half of the world's population lives in urban areas. That points to the complexity of urban issues that are hard to solve in disciplinary frameworks. Universities have the essential role in solving issues of the global time.

Transformation of contemporary methods and program conceptions is insufficient in meeting complex challenges. Collaborative research and a true transdisciplinary orientation is almost becoming an imperative at universities.

Complex system, such as the urban one, demands innovations and new forms of insight, and also interaction through all levels in solving urban issues that, in the light of social, socio-economical, political, ecological, climate and other changes, get intensively more complex. Fragmented knowledge implemented through urbanistic interventions is reflected negatively on the city and residents, on ecological and social dimensions. Non-sustainability of such a system is inevitable. Also, urban health, an especially sensitive issue of the 21st century, is getting more difficult to investigate in disciplinary frameworks.

The mission of contemporary higher education in the 21st century implies orientation towards a development strategy for integrated knowledge, which as such, can meet challenges of global processes: urbanization, cultural and social transformations. Sustainable development of the physical structure of the city is a primary issue for meeting the demands of the global time. Integrated urbanistic knowledge includes involving as many autonomous disciplines in the system of collaborative action, and also other forms of knowledge that can in joint action give solutions to issues of the global world in a local context. Transdisciplinary methodology of urban discourse in higher education can become a paradigm of sustainable urban development of the 21st century cities.

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